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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGUYEN, CHAU T

ART UNIT	PAPER NUMBER
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2176

DATE MAILED: 06/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/553,941

Applicant(s)

BAKER, JR., RICHARD A.

Examiner

Chau Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 8, 9 and 11-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-9, and 11-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Amendment D, received on 03/26/2004, has been entered. Claims 1-5, 8-9, and 11-30 are presented for examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 8-9, 11-18, 21-22, and 24-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glorikian, U.S. Patent No. 6,343,317, and further in view of Fukui, U.S. Patent No. 6,131,119.

4. As to claims 1, 11, and 21, Glorikian discloses a method of communication in an automation environment, comprising a plurality of network devices (col. 1, line 54 – col. 2, line 6 and col. 3, lines 53, col. 4, lines 40: client's appliances 29 and 31 enabled to connect to the Internet through integrated cellular telephone via base stations), each

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network device having a software program stored herein (col. 4, lines 8-21: client's appliances 29 and 31, each is enhanced with Internet browser software to be able to access and browse the Internet world), wherein each network device is positioned at a physical location and wherein each network device is adapted to perform a designated function according to the physical location of said each network device, so that the designated functions of the network devices can be carried out in a coordinated way as required in the automation environment (col. 1, line 54 – col. 2, line 6 and col. 4, line 30 – col. 5, line 11: the GPS apparatus is integrated into the circuitry of the units 29 and 31, and there is a GPS circuitry 57 in each unit 29 and 31 for receiving signals from multiple GPS satellites and for determining a location for the unit from the satellite signals, and also periodic requests are transmitted from the portable units 29 and 31 along with GPS position, updating the information to server13); , said method comprising the steps of:

identifying the physical location of said each network device using a physical site locator (col. 2, line 9 – col. 3, line 3: determining positions (physical location) of the appliances, and the position-determining system (physical site locator) is a GPS receiver at the appliances determining the position of the appliances on the Earth's surface);

However, Glorikian does not disclose associating the identifying physical location to a network address in the automation environment, so that the network address associated to said each network device can be used to caused the stored software

program to carry out the designated function of said each network device in the automation environment in relation to other network devices in the automation environment.

In the same field of endeavor, Fukui discloses an automatic configuration system maps a device address of each node coupled to a bus structure to a network protocol address corresponding to the physical location of the node (Fukui, Abstract, col. 2, line 43 – col. 3, line 22). Fukui also discloses an automatic configuration system maps a device or media access control (MAC) address of each passenger control unit to the physical location or seat position of the passenger control unit, and each passenger has access to one or more services such as audio and video on demand, video games, gambling, telephone service and information services (the network address associated to each network device to cause the stored software program to carry out the designated function for each device) (Abstract, col. 3, line 51 – col. 4, line 58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Glorikian and Fukui to include associating the identifying physical location to a network address in the network communications system, so that the network address associated to said each network device can be used in coordinating the designated function of said each network device with the designated function of other network devices in the network communication system. Fukui suggests that mapping devices to their corresponding physical location will make it easy to complete

device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users.

5. As to claim 2, Glorikian and Fukui (Glorikian-Fukui) disclose wherein the address of the device is a MAC address (Fukui, col. 4, lines 25-40: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users).

6. As to claim 3, Glorikian-Fukui disclose wherein the address of the device is an IP address (Fukui, col. 4, lines 24-58: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users).

7. As to claims 4 and 25, Glorikian-Fukui disclose transmitting from the device the physical location and the address thereof to a controlling station so as to allow the controlling station to associated the physical location to the address for conveying signals to the device (Glorikian, col. 2, lines 38-46, col. 4, line 63 – col. 5, line 11; Fukui, col. 3, line 51 – col. 4, line 58).

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8. As to claims 5, 24, and 27, Glorikian-Fukui disclose wherein the device has an intended function controlled by a software program, said method further comprising the step of loading the software program from the controlling station to the device after the physical location of the device is identified (Fukui, col. 3, line 51 – col. 4, line 24: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users).

9. As to claim 12, Glorikian-Fukui disclose a method of communicating with a plurality of devices in a network communications system wherein each device is positioned at a physical location, said method comprising the step of converting a map of the physical locations of the devices into one or more address tables, each table including a plurality of network addresses for routing messages to the devices (Glorikian, col. 2, lines 9-45; Fukui, col. 2, line 61 – col. 3, line 11: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users).

10. As to claim 13, Glorikian-Fukui disclose wherein a controlling station is used to associate the physical location to the network address of the respective device (Fukui,

col. 4, line 59 – col. 5, line 11: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users).

11. As to claims 8-9, and 26, Glorikian-Fukui disclose a method of communicating with a plurality of devices (Glorikian, col. 1, line 54 – col. 2, line 6 and col. 3, lines 53, col. 4, lines 40: client's appliances 29 and 31 enabled to connect to the Internet through integrated cellular telephone via base stations),

at least some of the devices having a software program stored therein (Glorikian, col. 4, lines 8-21: client's appliances 29 and 31, each is enhanced with Internet browser software to be able to access and browse the Internet world),

wherein each device is positioned at a physical location, said method comprising the step of converting a map of the physical locations of the devices into one or more address tables, each table including a plurality of network addresses for routing messages to the devices (Fukui, col. 4, lines 41-58: a system manager unit maps each seat CPU, using its MAC address, to corresponding IP address, and the IP address is mapped to a seat location or position (physical location), wherein at least one of the devices comprises a programmable logic controller having a network address assigned thereto from said address table (Fukui, col. 4, line 59 – col. 5, line 11: Fukui suggests

that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users),

and the physical locations of at least some of the devices are identified by a physical locator (Glorikian, col. 2, lines 9-46; Fukui, col. 5, lines 26-42: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users),

so as to cause the software program stored in each of said at least some of the devices to carry out a designated function coordinated in relation to designated functions to other network devices as required in the automation environment (Fukui discloses an automatic configuration system maps a device address of each node coupled to a bus structure to a network protocol address corresponding to the physical location of the node (Fukui, Abstract, col. 2, line 43 – col. 3, line 22). Fukui also discloses an automatic configuration system maps a device or media access control (MAC) address of each passenger control unit to the physical location or seat position of the passenger control unit, and each passenger has access to one or more services such as audio and video on demand, video games, gambling, telephone service and

information services (the network address associated to each network device to cause the stored software program to carry out the designated function for each device) (Abstract, col. 3, line 51 – col. 4, line 58).

12. As to claim 14, Glorikian-Fukui disclose the network communications system comprising a local area network (LAN) (Fukui, col. 2, lines 49-60: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users).

13. As to claim 15, Glorikian-Fukui disclose the network communications system comprising a wide area network (WAN) (Glorikian, col. 1, line 34 – col. 2, line 65).

14. As to claim 16, Glorikian-Fukui disclose the network communications system comprising a wireless access communications system (Glorikian, col. 2, lines 9-21).

15. As to claim 17, Glorikian-Fukui disclose wherein each device has a unique physical location (Fukui, col. 4, lines 41-58: Fukui suggests that the motivation for mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users).

16. As to claim 18, Glorikian-Fukui disclose wherein a plurality of devices share one of the physical locations (Glorikian, col. 5, lines 26-42).

17. As to claim 22, Glorikian-Fukui disclose wherein the identifying means comprises a GPS site locator (Glorikian, col. 2, lines 22-31).

18. As to claims 28, 29, and 30, Glorikian-Fukui disclose wherein the automation environment comprises a factory automation (Fukui, Abstract, col. 2, line 43 – col. 3, line 22 and col. 3, line 51 – col. 4, line 58).

19. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Glorikian and Fukui as applied to claims 1-5, 8-9, 11-18, 20-22, and 24-27 above, and further in view of Scott, U.S. Patent No. 6,195,706.

20. As to claim 19, Glorikian-Fukui disclose each device has a MAC address (Fukui, col. 4, lines 41-58). However, Glorikian-Fukui do not disclose wherein means for transmitting the MAC address and the shared physical location in a RARP message to a controlling station in order to establish the address of the device in the network communications system. In the same field of endeavor, Scott discloses RARP is well known to those of ordinary skill in the relevant arts, and using RARP mechanism for controlling operation of the network address mechanisms (col. 1, line 57 – col. 2, line

34). Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Glorikian-Fukui and Scott to include transmitting the MAC address and the shared physical location in a RARP message to a controlling station in order to establish the address of the device in the network communications system, since Scott suggests that using RARP to determine the system IP address.

21. As to claim 20, Glorikian-Fukui and Scott disclose wherein each device has an IP address and means for transmitting the IP address and the shared physical location in a RARP message to a controlling station in order to establish the address of the device in the network communications system (Scott, col. 1, line 57 – col. 2, line 34: the motivation for using RARP is to determine the system IP address).

22. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Glorikian and Fukui as applied to claims 1-5, 8-9, 11-18, 20-22, and 24-27 above, and further in view of Watters et al. (Watters), U.S. Patent No. 6,249,245.

23. As to claim 23, Glorikian-Fukui disclose the limitations as discussed in claims 1-5, 8-9, 11-18, 20-22, and 24-27 above. However, Glorikian-Fukui do not disclose wherein the identifying means comprises a TDOA device. In the same field of endeavor, Watters discloses calculating position using TDOA measurements when the actual time of transmission is not known (col. 4, line 66 – col. 5, line 13). Thus, it would

have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Glorikian-Fukui and Watters to include a TDOA device to for determining location in a cellular network portion of the system in case GPS satellites are not in clear view of the GPS receiver.

Response to Arguments

24. In the remarks, Applicant argued in the substance that

(A) "Claims 1, 8, 9, 11 and 21 are rejected by the examiner under 35 U.S.C § as being anticipated by Glorikian (US Patent 6,343,317) in further view of Fukui (US Patent 6,131,119). This rejection is improper, because neither reference can provide all of the limitations of the claims in the present application".

As to point A, Examiner rejected claims 1-5, 8-9, 11-18, 20-22, and 24-27 under 35 U.S.C. 103(a) as being **unpatentable** over Glorikian, U.S. Patent No. 6,343,317, and further in view of Fukui, U.S. Patent No. 6,131,119, not **anticipated** by Glorikian and Fukui as if the applicant argued above.

(B) Neither Glorikian nor Fukui contains references to "an automation environment"

As to point (B), Glorikian discloses identifying the physical location of said each network device using a physical site locator (col. 2, line 9 – col. 3, line 3: determining positions (physical location) of the appliances, and the position-determining system (physical site locator) is a GPS receiver at the appliances determining the position of the appliances on the Earth's surface);

However, Glorikian does not disclose associating the identifying physical location to a network address in the automation environment, so that the network address associated to said each network device can be used to caused the stored software program to carry out the designated function of said each network device in relation to other network devices.

In the same field of endeavor, Fukui discloses an automatic configuration system maps a device address of each node coupled to a bus structure to a network protocol address corresponding to the physical location of the node, and a topology map, including the device addresses of the nodes within the network and their relationship to each other (Fukui, Abstract, col. 2, line 43 – col. 3, line 22). Fukui also discloses an automatic configuration system maps a device or media access control (MAC) address of each passenger control unit to the physical location or seat position of the passenger control unit, and each passenger has access to one or more services such as audio and video on demand, video games, gambling, telephone service and information services (the network address associated to each network device to cause the stored software

program to carry out the designated function for each device) (Abstract, col. 3, line 51 – col. 4, line 58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Glorikian and Fukui to include associating the identifying physical location to a network address in the network communications system, so that the network address associated to said each network device can be used in coordinating the designated function of said each network device with the designated function of other network devices in the network communication system. Fukui suggests that mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users.

(C) “Each of claims 1, 8, 9, and 21 contain the further limitation of “each network device is adapted to perform a designated function according to the physical location of said each network device”. (In claims 8 and 9 the wording is slightly different, but contain a similar meaning.) The Examiner notes that this limitation is not present in Glorikian, and looks to Fukui for this limitation.” (Page 9 of Amendment D)

As to point (C), Examiner noted in the rejection of claim 1 that Glorikian teaches each network device is positioned at a physical location and wherein each network device is adapted to perform a designated function according to the physical location of said each network device, so that the designated functions of the network devices can

be carried out in a coordinated way as required in the automation environment (col. 1, line 54 – col. 2, line 6 and col. 4, line 30 – col. 5, line 11: the GPS apparatus is integrated into the circuitry of the units 29 and 31, and there is a GPS circuitry 57 in each unit 29 and 31 for receiving signals from multiple GPS satellites and for determining a location for the unit from the satellite signals, and also periodic requests are transmitted from the portable units 29 and 31 along with GPS position, updating the information to server13). However, Glorikian does not explicitly disclose associating the identifying physical location to a network address **in the automation environment**, so that the network address associated to said each network device can be used to caused the stored software program to carry out the designated function of said each network device in the automation environment in relation to other network devices in the automation environment. Therefore, Examiner introduces the reference Fukui, which discloses an automatic configuration system maps a device address of each node coupled to a bus structure to a network protocol address corresponding to the physical location of the node, and a topology map, including the device addresses of the nodes within the network and their relationship to each other (Fukui, Abstract, col. 2, line 43 – col. 3, line 22). Fukui also discloses an automatic configuration system maps a device or media access control (MAC) address of each passenger control unit to the physical location or seat position of the passenger control unit, and each passenger has access to one or more services such as audio and video on demand, video games, gambling, telephone service and information services (the network address associated to each network device to cause the stored software program to carry out the designated

function for each device) (Abstract, col. 3, line 51 – col. 4, line 58). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Glorikian and Fukui to include associating the identifying physical location to a network address in the network communications system, so that the network address associated to said each network device can be used in coordinating the designated function of said each network device with the designated function of other network devices in the network communication system. Fukui suggests that mapping devices to their corresponding physical location will make it easy to complete device specific or user specific billing, easy to block service or types of services to particular devices and easy to personalize service to specific devices and users.

(D) “An automation environment is coordinated as described on pages 5 and 6 of the present application, and is very different from the GPS functionality of Glorikian that is used in the Examiner’s argument.” (page 10 of Amendment D)

As to point (D), Examiner did not argued that Glorikian teaches an automation environment. In fact, Examiner pointed out that Glorikian does not explicitly disclose associating the identified physical location to a network address in an automation environment. Fukui discloses an automatic configuration system maps a device address of each node coupled to a bus structure to a network protocol address corresponding to the physical location of the node, and a topology map, including the device addresses of the nodes within the network and their relationship to each other

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(Fukui, Abstract, col. 2, line 43 – col. 3, line 22). Fukui also discloses an automatic configuration system maps a device or media access control (MAC) address of each passenger control unit to the physical location or seat position of the passenger control unit, and each passenger has access to one or more services such as audio and video on demand, video games, gambling, telephone service and information services (the network address associated to each network device to cause the stored software program to carry out the designated function for each device) (Abstract, col. 3, line 51 – col. 4, line 58).

25. Applicant's arguments and amendments filed on 03/26/2004 have been fully considered but they are not deemed fully persuasive. Please see the explanation of the rejection and response to arguments above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chau Nguyen whose telephone number is (703) 305-4639. The Examiner can normally be reached on Monday-Friday from 8:00 am to 6:00 pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Joseph Feild, can be reached at (703) 305-9792.

The fax phone numbers for the organization where this application is assigned are as follows:


(703) 872-9306 (After Final Communications only)

(703) 872-9306 (Official Communications)

(703) 746-7240 (for Official Status Inquiries, Draft Communications only)

Inquiries of a general nature relating to the general status of this application or proceeding should be directed to the 2100 Group receptionist whose telephone number is (703) 305-3900.

Chau Nguyen
Patent Examiner
Art Unit 2176


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER